

REMARKS

Claims 1, 3 and 7-22 are now pending in the application. Claims 2, 4-6 have been cancelled without prejudice. Claims 9-22 have been previously withdrawn from consideration. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1, 3, 7 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0060518 to Duineveld et al. This rejection is respectfully traversed.

This rejection asserts that U.S. Patent Application Publication No. 2002/0060518 (hereinafter "the '518 publication"), especially figure 2C, discloses the present invention except for the thickness of the protrusion having no less than 5µm. Applicants, however, disagree with this assertion. Specifically, Claim 1 recites "protrusions are provided on the substrate so as to cover the ends of the electrode and are convexly curved relatively to the surface of the substrate . . . and the thickness of the protrusions is not less than 5 µm." (Emphasis added.) In addition, Claim 1 recites "an electroluminescent layer provided in each opening which is located on the electrode and defined by adjacent protrusions." (Emphasis added.) Since the electroluminescent layer is defined by adjacent protrusions, the ink comprising EL materials which forms the electroluminescent layer is completely bounded by "protrusions" that are "convexly curved" and have a thickness of "not less than 5µm." This construction can provide many benefits. For example, the ink comprising EL materials that forms the

electroluminescent layer can be restricted to the appropriate pixel area by the height of the convexly curved the convexly curved protrusions.

This structure is not present in the '518 publication. Figure 2 of the '518 publication illustrates an EL device 101, and Figures 2A to 2C show enlarged cross-section views along the lines II-II, III-III and IV-IV of Figure 2, respectively. See, column [0116] of the '518 publication. Thus, the EL device shown in Figures 2, 2A, 2B and 2C are all different illustrations of the same EL device 101. In order to aid the understanding the '518 publication, Applicants have added the cross-section lines II-II, III-III and IV-IV of Figure 2 to Figure 3 of the '518 publication and attached it hereto. The enlarged cross-section views of the EL device 101 shown in Figures 2A and 2B includes a composite relief pattern 107, which comprises a first relief pattern 109 and a second relief pattern 108. Thus, Figures 2A and 2B show this same construction (i.e., a first relief pattern 109 and a second relief pattern 108) in EL device 101.

In contrast, the enlarged cross-section view of the EL device 101 shown in Figure 2C is clearly distinguished from the above construction. The portion of the EL device 101 shown in Figure 2C does not comprise a composite relief pattern 107, which comprises a first relief pattern 109 and a second relief pattern 108, but has only the second relief pattern 108. Accordingly, the electroluminescent layer that forms the pixel areas 110, 111 and 112 are not defined by the high "not less than 5 μ m" protrusions as recited in Claim 1. As attached Figure 3 illustrates, pixel areas 31G (corresponding to 110, 111 and 112 of Figure 2) are not covered with composite relief pattern 27 (corresponding to 107 of Figure 2) and with protrusions 35 (corresponding to 115 of Figure 2) near the area along the lines IV-IV of the revised Figure 3. Therefore, we

easily understand that the ink-fluid drops containing EL materials provided by an inkjet method can overflow onto the second relief pattern 108 near the area along the lines IV-IV of Figure 2.

In fact, the '518 publication teaches that an aqueous solution having a charge transport material, i.e., EL materials are deposited into the second relief pattern 108 and then the layer is much higher (8 μ m) than the height of composite relief pattern 107 (see in paragraph [0120] of the '518 publication). Since this the '518 publication teaches this flow of the EL materials over the protrusions as part of the fabrication process, there is no motivation to modify the '518 publication to use higher protrusions that might prevent this fabrication process. In addition, the '518 publication teaches that areas of EL material indicated with reference sign 105a show that some fluid drained from the pixel area 112 has been able to pass the protrusions 115 and that this is acceptable (see paragraph [0122] of the '518 publication). Again, because the '518 publication teaches that some flow of the electroluminescent layer over the protrusions is acceptable, there is no motivation to modify the '518 publication to "define [the electroluminescent layer] by adjacent protrusions" as recited in Claim 1.

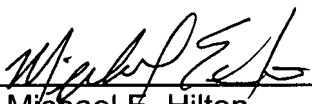
For at least the reasons discussed above, Applicants respectfully assert that the '518 publication does not disclose or suggest the invention as defined by Claim 1. Since Claims 3, 7 and 8 dependent from Claim 1, Applicants respectfully assert that they are likewise patentable for at least the same reasons discussed above regarding Claim 1.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: 9 MAY 2007

By: 
Michael E. Hilton
Reg. No. 33,509

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

MEH/jks